

## Common GUI for “in situ” single board diagnostics

### What do we need:

- A graphical interface common to all the SVT boards test programs.  
The test has to be executed without cable removing

### What I need to do the job:

- 1) Test programs: developed by the board designer (most programs already exist)

My suggestion: single C functions

e.g. `hb_test(slot, crate, parameter_file)`

- 2) Input data files to be sent to the board under test  
Output file for the check

- A short note about the standards  
that I think we should follow is in preparation.  
( I'll be in Fermilab for all the workshop week to discuss  
the details with interested people)

- Of course we could take the decision to use compiled test programs for the single boards and the GUI could be a script (TCL/TK or something else ...) but I prefer C functions, to be included in **SVTVME** library.
- At the moment I think that we should follow Luciano suggestion to have a simple answer from the test like OK or ERROR and a logfile with the details to be interpreted from experts. I'm trying to define logfiles format in the note.
- Boards location and cable connections defined in a configuration text file, in a format easy to change. Maybe the package could provide a graphical representation of the loaded configuration file.

- We may need to be able to change **Spy Control** master/slave and merger enabled channels from software.  
The revised Spy Control firmware is ready to be loaded, just in case .... What about the merger ?
- We have to think how to test SVT boards at the beginning of the chain (HF) and the last merger before Jane's board. May be it is enough to use Spy buffers
- For the GUI I propose to use C language and the graphical library GTK++ (already used by Subir)  
The GUI will run under Linux OS

## STATUS:

I'm trying to define the standards that should be discussed with the boards experts. I'm also studying GTK++ library ... I expect to start writing the real code after the SVT workshop. The completion of the package is related to the date that the test routines will be released from boards experts